Patent US 313C2 Attorney Docket: 612,404-426

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of the Claims

 (Currently Amended) A method for detecting a polymorphism related to a genetic disease in a patient sample nucleic acid, comprising the steps of:

providing the patient sample nucleic acid containing a first and a second loci having a first and second polymorphism, respectively, related to the genetic disease at a microarray site;

providing an unlabeled blocker that is complementary to the first locus containing the first polymorphism related to the genetic disease;

hybridizing the unlabeled blocker with the first locus <u>such that the first polymorphism is</u> blocked by the unlabeled <u>blocker</u>, wherein the second locus is unblocked;

providing a detectable discriminator that is capable of hybridizing with the second locus containing the second polymorphism related to the genetic disease;

hybridizing the detectable discriminator with the second locus containing the second polymorphism related to the genetic disease; and

detecting the second polymorphism related to the genetic disease by detecting the presence of the discriminator at the microarray site.

- 2-5. (Canceled)
- (Previously Presented) The method of claim 1, wherein the microarray site comprises a site of an actively addressable electronic microarray.

2873264.1

Patent US 313C2 Attorney Docket: 612,404-426

7. (Previously Presented) The method of claim 6, wherein the addressable electronic microarray includes a permeation layer.

- 8. (Previously Presented) The method of claim 1, wherein the patient sample is amplified.
- 9. (Previously Presented) The method of claim 8, wherein the amplification includes polymerase chain reaction (PCR).
- (Withdrawn-Previously Presented) The method of claim 8, wherein the amplification includes ligase chain reaction (LCR).
- (Withdrawn- Previously Presented) The method of claim 8, wherein the amplification includes strand displacement amplification (SDA).
- (Withdrawn- Previously Presented) The method of claim 8, wherein the amplification includes the transcription-based amplification system (TAS).
- (Withdrawn- Previously Presented) The method of claim 8, wherein the amplification includes the self-sustained sequence replication system (3SR).
- 14. (Withdrawn- Previously Presented) The method of claim 8, wherein the amplification includes the Q $\beta$  replicase amplification system (Q $\beta$ ).

## 15-17. (Canceled)

- 18. (Previously Presented) The method of claim 1, further includes the step of performing a screening step.
- (Previously Presented) The method of claim 1, wherein the patient sample nucleic acid comprises multiple segments containing different loci.
- (Previously Presented) The method of claim 19, wherein the multiple segments containing different loci are affixed to the same microarray site.

2873264.1

Patent US 313C2 Attorney Docket: 612,404-426

- (Withdrawn- Previously Presented) The method of claim 19, wherein the multiple segments containing different loci are affixed to the different sites.
- (Previously Presented) The method of claim 6, wherein the multiple patient samples are provided on multiple sites of the microarray.
- ${\bf 23.} \qquad \hbox{(Previously Presented)} \qquad \qquad \hbox{The method of claim 1, further comprising the steps} \\$

providing a labeled amplification control that is capable of binding with the patient nucleic acid sample; and

hybridizing the labeled amplification control to the patient nucleic acid sample.

- 24. (Canceled)
- $25. \hspace{0.5cm} \hbox{(Previously Presented)} \hspace{0.5cm} \hbox{The method of claim 1, wherein the genetic disease} \hspace{0.5cm}.$  is cystic fibrosis.

26-44. (Canceled)

2873264.1